

AMENDMENTS TO THE CLAIMS

Claim 1 (Withdrawn) A method for determining relevant additional resources with respect to a given set of starting resources, characterized in that it comprises the following steps: a) identifying a set of citing resources that consist of all the resources having a link to at least one of the starting resources, b) forming a set of candidate resources that consists of the set of resources cited by the citing resources, c) for each candidate resource, calculating a candidate resource relevance score between said candidate resource and the set of starting resources on the basis of the existence of links situated in the citing resources and directed toward the candidate resource and toward the starting resources, and on the basis also of citing resource relevance scores assigned to each of the citing resources, d) for each citing resource, recalculating a citing resource relevance score on the basis of the existence, in the citing resource in question, of links to the candidate resources and on the basis also of the candidate resource relevance scores allocated to the candidate resources in step c), e) repeating as appropriate step c) and step d) as appropriate one or more times followed by step c), f) determining said relevant additional resources as being the candidate resources which exhibit the best candidate resource relevance scores.

Claim 2 (Withdrawn) The method as claimed in claim 1, characterized in that the relevance score calculation performed in step c) comprises the calculation of a plurality of sums of citing resource relevance scores, each sum comprising only the relevance scores of the citing resources comprising a link to a given resource consisting of the candidate resource or a starting resource.

Claim 3 (Withdrawn) The method as claimed in claim 2, characterized in that it also comprises the calculation of at least one sum of citing resource relevance scores, each sum comprising only the relevance scores of the citing resources comprising a link to one among a set of at least two given resources, this set comprising the candidate resource and at least one starting resource.

Claim 4 (Withdrawn) A method for determining relevant additional resources with respect to a given set of starting resources, characterized in that it comprises the following steps: a) identifying a set of cited resources that consist of all the resources having a link to at least one of the starting resources, b) forming a set of candidate resources that consists of the set of resources citing the cited resources, c) for each candidate resource, calculating a candidate resource relevance score between said candidate resource and the set of starting resources on the basis of the existence of links situated in the candidate resource and in the starting resources and directed toward the cited resources, and on the basis also of cited resource relevance scores assigned to each of the cited resources, d) for each cited resource, recalculating a cited resource relevance score on the basis of the existence, in the cited resource in question, of links to the candidate resources and on the basis also of the candidate resource relevance scores allocated to the candidate resources in step c), e) repeating as appropriate step c) and step d) as appropriate one or more times followed by step c), f) determining said relevant additional resources as being the candidate resources which exhibit the best candidate resource relevance scores.

Claim 5 (Withdrawn) A system for browsing among information resources, each resource comprising at least one link activatable in a first mode by an input device so as to bring about access to another information resource designated by a resource identifier associated with this link, characterized in that at least certain resources comprise at least one link activatable in a second mode with the aid of an input device so as to send to an engine for searching for new information resources a search query containing the resource identifier associated with the link in question.

Claim 6 (Withdrawn) The system as claimed in claim 5, characterized in that the input device is able to activate the link simultaneously in the first and second modes.

Claim 7 (Withdrawn) The system as claimed in claim 5, characterized in that the activation of the link in the second mode is able to bring about the displaying of a pre-existing query, to which the resource identifier associated with the link in question is able to be added.

Claim 8 (Withdrawn) The system as claimed in claims 6 and 7 taken in combination, characterized in that the activation of the link in the second mode is able to display, in addition to the pre-existing query, the information resource designated by said resource identifier.

Claim 9 (Withdrawn) A system for searching for new information resources on the basis of existing information resources, characterized in that it comprises a search engine based on the analysis of links between the various resources and accepting as input a query comprising a series of resource identifiers, a means of selecting identifiers which is able to store a set of identifiers (URI) of resources selected one after the other by a user, and a user activatable query generating means for devising a query containing the set of identifiers previously selected destined for the search engine.

Claim 10 (Withdrawn) The system as claimed in claim 9, characterized in that the means of selection is able to store the identifiers selected in a remanent manner, in such a way that the means of selection can be implemented in a manner staggered over time with a view to the generation of one and the same query.

Claim 11 (Withdrawn) A method of searching for new information resources on the basis of existing information resources, characterized in that it comprises the implementation of a search engine based on the analysis of links between various resources and accepting as input a query comprising a series of resource identifiers and in that it comprises the following steps: selection of identifiers (URI) of resources one after the other by a user; generation of a query containing the set of identifiers previously selected destined for the search engine.

Claim 12 (Withdrawn) A method of searching for new information resources on the basis of existing information resources, characterized in that it comprises the implementation of a search engine based on the analysis of links between various resources and accepting as input a query comprising a series of resource identifiers and in that it comprises the following steps: generation of a query containing a set of identifiers of resources previously stored in one and the same group of resource identifiers individual to a user, destined for the search engine,

generation of a signaling for the attention of the user when at least one new resource identifier belonging to the group in question has been found by the engine.

Claim 13 (Withdrawn) The method as claimed in claim 12, characterized in that each group of resource identifiers is represented by a graphical object on a display device of the user, and in that said signaling is carried out at least by change of appearance of this graphical object.

Claim 14 (Withdrawn) A method of managing resources in a computer system provided with a display screen and with an input device for cursor movement and actuation such as a mouse, each resource possessing a representation displayed on the screen in such a way as to be able to be moved with the aid of the input device, method characterized in that it comprises the following steps: movement of the representation of a first resource so as to bring it above the representation of a second resource, followed by storage, in an associative memory for managing resources, of information of association between the first and second resources.

Claim 15 (Withdrawn) The method as claimed in claim 14, characterized in that the movement step is performed by a drag and drop technique.

Claim 16 (Withdrawn) The method as claimed in claim 14 or 15, characterized in that it furthermore comprises, subsequent to the identification of a given resource in a resource consultation process, the following steps: reading of the associative memory for managing resources to determine whether other resources are associated with said given resource, and if so, signaling on the display screen of the existence of the associated resource or resources.

Claim 17 (Withdrawn) The method as claimed in one of claims 14 to 16, characterized in that the resources comprise files.

Claim 18 (Withdrawn) The method as claimed in one of claims 14 to 17, characterized in that the resources comprise resources accessible via a network such as the Internet.

Claim 19 (Withdrawn) The method as claimed in claim 16, characterized in that the identification of a given resource is obtained via a process for identifying similar or relevant resources with respect to at least one starting resource.

Claim 20 (Withdrawn) The method as claimed in claim 16 or 19, characterized in that, in the case where the reading of the associative management memory determines the existence of several associated resources, the signaling step comprises the ordered signaling of at least part of said several associated resources.

Claim 21 (Withdrawn) The method as claimed in claim 20, characterized in that the ordered signaling is based on the determination of relevance scores of said associated resources.

Claim 22 (Withdrawn) The method as claimed in one of claims 14 to 21, characterized in that the associative memory for managing resources is contained in a server accessible from a plurality of individual stations in which the movement step can be implemented.

Claim 23 (Withdrawn) The method as claimed in claim 22, characterized in that the associations between resources are stored user by user.

Claim 24 (Withdrawn) The method as claimed in claim 22, characterized in that the associations between resources are stored in a mutualized manner between several users.

Claim 25 (Withdrawn) A method for identifying on the basis of a text resource, part of said resource able to constitute a pertinent query for a search engine, characterized in that it comprises the following steps: removing the nonpertinent words from the text; establishing and completing a memory of links between parts of said text, where a part is linked to another when it contains at least one pertinent word in common; implementing a method of determining

resource scores by analysis of a graph of resource nodes connected by links, where each resource used in this method consists of a part of the text, on the parts of the text that are thus interconnected; using at least one of the text parts consisting of the candidate resources determined by said method as query text or as basis for a query text.

Claim 26 (Withdrawn) The method as claimed in claim 25, characterized in that the step of implementing the method according to one of claims 1 to 4 is performed only with text parts selected as prevalent, where the citing text parts are the text parts which comprise at least one word in common with the prevalent text part or parts, where a link is created from each citing text part to the prevalent text part or parts, where the text parts containing at least one word also contained in the citing text parts are identified, so as to form a group of co-cited text parts, and where a link is temporarily created from each citing text part to each co-cited text part with which said citing text part possesses at least one word in common.

Claim 27 (Withdrawn) The method as claimed in one of claims 25 and 26, characterized in that the text parts are phrases.

Claim 28 - Claim 36 (Cancelled)

Claim 37 (Withdrawn) A method for identifying information resources accessible via recent links (such as web pages), relevant with respect to at least one given resource, characterized in that it comprises the following steps: applying a query comprising an identifier of said given resource to a system for determining relevance between resources, selecting a first set of resources that are the most relevant (e.g. best hub scores) with respect to said given resource, searching, through each of the most relevant resources, for the regions possessing links to other resources of averagely high relevance, so-called relevant regions, monitoring the appearance, in said relevant regions, of new links which point to resources which were not yet known to the system, so-called new resources, selecting a second set of resources having a high relevance (e.g. best hypertext authority scores) with respect to said given resource, selecting the new resources which have a highest similarity of content with respect to the resources of said second set of resources and according the new resources selected a relevance level (similarity

authority score) dependent on time as a function of said similarity of content.

Claim 38 (Withdrawn) A method for allowing access by a user to relevant information entities from a starting information entity, each information entity being accessible via an identifier (URI), characterized in that it comprises the following steps: a) providing at least one similar information entity, exhibiting a content similar to that of the starting entity, and determining the identifier of the or of each similar information entity, and b) determining on the basis of the or each similar information entity identifier a set of one or more identifiers of information entities relevant with respect to the or each similar information entity.

Claim 39 (Withdrawn) The method as claimed in claim 38, characterized in that it furthermore comprises the following step: c) allowing the user to access at least certain relevant information from their respective identifiers.

Claim 40 (Withdrawn) The method as claimed in claim 38 or 39, characterized in that it furthermore comprises the following step: d) on the basis of the relevant information entity identifiers and of a given set of extra information entities, selecting the extra entities that are most similar to the relevant information entities.

Claim 41 (Withdrawn) The method as claimed in one of claims 38 to 40, characterized in that it comprises an extra step of sorting the relevant information entities by degree of relevance.

Claim 42 (Withdrawn) The method as claimed in claim 41, characterized in that the sorting step is preceded by a step of calculating a relevance score with respect to the or each similar information entity for each of the relevant information entities.

Claim 43 (Withdrawn) The method as claimed in one of claims 38 to 42, characterized in that each information entity consists of a page fragment written in a standardized mark-up language, or of such a page as a whole.

Claim 44 (Withdrawn) The method as claimed in claim 43, characterized in that each identifier consists of a uniform resource identifier (URI) of the fragment or of the page.

Claim 45 (Withdrawn) The method as claimed in one of claims 38 to 44, characterized in that step a) is carried out by selection by the user of one or more information entities similar to the starting information entity.

Claim 46 (Withdrawn) The method as claimed in one of claims 38 to 44, characterized in that step a) is carried out by implementing a process for automatically determining similar information entities.

Claim 47 (Withdrawn) The method as claimed in one of claims 38 to 44, characterized in that step a) is carried out by implementing a process for automatically determining similar information entities, followed by a selection by the user of one or more similar information entities from among the similar information entities determined by said process.

Claim 48 (Withdrawn) The method as claimed in one of claims 38 to 47, characterized in that step b) is carried out by implementing a process for automatically determining relevant information entities.

Claim 49 (Withdrawn) The method as claimed in claim 48, characterized in that the process for automatically determining relevant information entities comprises the analysis of a graph structure of identifiers that consists of the identifiers of information entities and of the identifiers designated by user activatable links contained in said information entities.

Claim 50 (Withdrawn) A method for determining relevance scores of text units such as phrases in a textual document, characterized in that it comprises the following steps: decomposition of the document into a plurality of text units, selection of at least one relevant text unit and of candidate text units, determination of the set of pertinent words contained in the relevant text unit (or units) and in each of the candidate text units, for each pertinent word

contained in the relevant text unit (or units), identification of the candidate text units citing this pertinent word, to form a group of citing text units, identification of the candidate text units containing at least one pertinent word also cited in the citing text units, to form a group of co-cited text units, assigning to the co-cited text units a relevance score as a function of said citations.

Claim 51 (Withdrawn) A method for determining relevance scores of text units such as phrases in a textual document, characterized in that it comprises the following steps: decomposition of the document into a plurality of text units, selection of at least one relevant text unit and of candidate text units, determination of the set of pertinent words contained in the relevant text unit (or units) and in each of the candidate text units, for each pertinent word contained in the relevant text unit (or units), identification of the candidate text units comprising this pertinent word, to form a group of cited text units, identification of the candidate text units containing at least one pertinent word also cited in the cited text units, to form a group of co-citing text units, assigning to the co-citing text units a relevance score as a function of said citations.

Claim 52 (Withdrawn) A method for determining scores allocated to words or groups of words contained in text units such as phrases in a textual document, characterized in that it comprises a step which consists in adding up the relevance scores, determined according to one of claims 50 and 51, of the text units in which said words are located.

53. (New) A method for managing information resources in a computer system for the purpose of resource retrieval, the method comprising:

- a) providing a first resource to be retrieved,
- b) providing a second resource having a potential relevance relationship with other resources based on a relevance scoring process,
- c) receiving user information from a user input device, said user information being representative of a declaration that said first resource is associated with said second resource for the purpose of being later retrieved, and storing information relative to this declaration;
- d) when selecting for access, by a user input device, said second resource:
 - d1) displaying said second resource,
 - d2) based on said stored information, further displaying an indicator of the existence of said first resource,
- e) when selecting for access, by a user input device, an other resource:
 - e1) determining whether said other resource is relevant with respect to said second resource,
 - e2) displaying said other resource, and
 - e3) if step e1) has determined a relevance between said other resource and said second resource, based on said stored information, further displaying an indicator of the existence of said first resource,
- f) retrieving said first resource thanks to said indicator by accessing said second resource or any other resource having a relevance relationship with the second resource.

54. (New) The method as claimed in claim 53, wherein said user information received in said step c) is representative of a declaration that said first resource is associated with several second resources.

55. (New) The method as claimed in claim 53, wherein said second resource comprises a group of resources, and wherein said relevance scoring process finds other resources based on an input including said group of resources.

56. (New) The method as claimed in claim 55, wherein said group of resources comprises resources derived from a browsing context.

57. (New) The method as claimed in claim 55, wherein said group of resources forms a spot of resources.

58. (New) The method as claimed in claim 53, wherein said step b) is performed by comparing a relevance score with a threshold.

59. (New) The method as claimed in claim 53, wherein said step b) is performed by using relevance data previously obtained by said relevance scoring process performed between said other resource and said second resource.

60. (New) The method as claimed in claim 53, wherein said step b) is performed by performing said relevance scoring process between said other resource and said other resource once said other resource has been selected.

61. (New) The method as claimed in claim 53, wherein said indicator comprises a link to said first resource.

62. (New) The method as claimed in claim 53, wherein said step c) comprises receiving information from said user input device which is a pointing input device, said information being representative of actions made with said pointing input device on displayed graphical objects representative of said first resource and said second resource.

63. (New) The method as claimed in claim 53, wherein said step c) further comprises the storage in a user associative memory of information representative of an association between the first and second resources.

64. (New) The method as claimed in claim 55, wherein said relevance scoring process comprises implementing a search engine based on the analysis of links between various

resources based on an input query comprising a series of resource identifiers designating the resources of said group.

65. (New) The method as claimed in claim 53, wherein said second and other resources are connected by links contained in citing resources for directly accessing said cited resources, and said relevance scoring process comprises the following steps:

i) identifying a set of citing resources that includes all the resources having a link to at least one starting resource,

ii) forming a set of candidate resources that includes all resources cited by said citing resources,

iii) for each candidate resource, calculating a candidate resource relevance score between said candidate resource and the at least one starting resource on the basis of the existence of links situated in the citing resources and directed toward the candidate resource and toward the at least one starting resource, and on the basis of citing resource relevance scores assigned to each of the citing resources,

iv) for each citing resource, recalculating a citing resource relevance score on the basis of the existence, in the citing resource in question, of links to the candidate resources and on the basis of the candidate resource relevance scores allocated to the candidate resources in said step iii),

v) repeating said calculating and said recalculating one or more times followed by said calculating,

vi) determining relevant resources as being the candidate resources which exhibit best candidate resource relevance scores.

66. (New) The method as claimed in claim 65, wherein the relevance score calculation performed in said step iii) comprises the calculation of a plurality of sums of citing resource relevance scores, each sum comprising only the relevance scores of the citing resources comprising a link to a given resource including the candidate resource or a starting resource.

67. (New) The method as claimed in claim 66, further comprising the calculation of at least one sum of citing resource relevance scores, each sum comprising only the relevance scores

of the citing resources comprising a link to one among a set of at least two given resources, this set comprising the candidate resource and a starting resource.

68. (New) The method as claimed in claim 53, wherein said second and other resources are connected by links contained in citing resources for directly accessing said cited resources, and said relevance scoring process comprises the following steps:

i) identifying a set of cited resources that includes all the resources having a link from at least one starting resource,

ii) forming a set of candidate resources that includes all resources citing the cited resources,

iii) for each candidate resource, calculating a candidate resource relevance score between said candidate resource and the at least one starting resource on the basis of the existence of links situated in the candidate resource and in the at least one starting resource and directed toward the cited resources, and on the basis of cited resource relevance scores assigned to each of the cited resources,

iv) for each cited resource, recalculating a cited resource relevance score on the basis of the existence, in the cited resource in question, of links to the candidate resources and on the basis also of the candidate resource relevance scores allocated to the candidate resources during said calculating,

v) repeating said calculating and said recalculating one or more times followed by said calculating, and

vi) determining relevant resources as being the candidate resources which exhibit the best candidate resource relevance scores.

69. (New) The method as claimed in claim 65, wherein said second resource constitutes a starting resource.

70. (New) The method as claimed in claim 68, wherein said second resource constitutes a starting resource.

71. (New) The method as claimed in claim 53, wherein said first resource is a personal file, and said second and other resources are Web pages.